# **ELECTRIC START KIT**

### P/N 2880396



#### **APPLICATION**

All Polaris AXYS Snowmobiles (Excluding RMK)

#### **BEFORE YOU BEGIN**

Read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

#### **KIT CONTENTS**

This Kit includes:

REF	QTY	PART DESCRIPTION	PART NUMBER
1	1	Stud Plate Assembly	1017181
2	1	Weld Battery Box	1022248
3	1	Stud Plate Assembly, 60.96mm	1017255
4	1	Pinion Assembly/Pinion Bracket	1204372
5	1	Drive Clutch Assembly	1323210-SP
6	1	Harness ES, DC-SDI Rush	2412713
7	1	Cable, Battery/Solenoid	2412723
8	1	Switch, Magnetic	4012358
9	1	Cable, 1155mm, Red	4014682
10	1	Cable, 1225mm, Black	4014683
11	1	Starter Motor Assembly	4012729
12	2	Hook-D	5224468
13	1	Bracket, Electric Start / Clip	1020244
14	1	Bracket, Electric Start / UCA Tube Upper	1020243
15	1	Bracket, Electric Start / UCA Tube Lower	1018033
16	1	Shield-Heat Battery	5262301
17	1	Rubber Strap	5410608
18	1	Shaft-Flex Starter	6230404
19	4	Cable Tie	7080138
20	1	Clamp-Band, Narrow 70-90mm	7081279
21	2	Nut - 1/4-20 Nyloc	7542153
22	4	Nut - M6x1.0 FLG - Nyloc Olive	7547339
23	1	Screw HXF - M6 X 1 X 16 8.8	7518548
24	3	Screw - M8 X 1.25 X 25	7518699
25	5	Bolt -M6 X 1.0 X 15, PH/TX	7518656

REF	QTY	PART DESCRIPTION	PART NUMBER
26	1	Foam-Seal, Rear Cooler	5810947
27	3	Nut - 1/4-20 Hex-Y	7542105
28	3	Washer - 1/4 Spring Lock-Y	7552801
29	1	Screw - HXFL-M8 X 1.25	7518906
30	1	Washer/Plate	5259426
31	1	Tie Strap	7081496
32	1	Seal Bulb, 14cm	5521697-14
	1	Instructions	9925574

#### **TOOLS REQUIRED**

- Battery (PN 4013045)
- Metric Socket Set
- Metric Wrench Set
- Large Phillips Screwdriver
- Master Repair Manual (MRM)
- 6mm Allen Wrench Or Short Allen Socket
- Clutch Puller (PN 2872085)
- Flat Screwdriver
- Torque Wrench

### IMPORTANT

- 7/16 Socket
- T-40 Torx<sup>®</sup> Socket
- Strap Puller (PN 2870336)
- Spring Puller
- Side Cutter
- T-30 Torx<sup>®</sup> Socket
- 3/8" Ratchet

Your ELECTRIC START KIT is exclusively designed for your vehicle. Please read the installation instructions thoroughly before beginning. Installation is easier if the vehicle is clean and free of debris. For your safety, and to ensure a satisfactory installation, perform all installation steps correctly in the sequence shown.

#### **ASSEMBLY TIME**

Approximately XX minutes

#### **INSTALLATION INSTRUCTIONS**

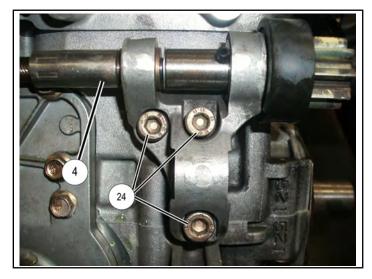
- 1. Set vehicle parking brake. Turn the key to "OFF" position and remove from the vehicle.
- 2. Order battery (PN 4012638).
- 3. Charge battery per instructions included with the battery.
- 4. Remove the hood and both side panels.
- 5. Remove the exhaust pipe and silencer.
- 6. Verify the unit is not in reverse.

#### NOTE

Driven clutch cover will not open if stopped in reverse mode.

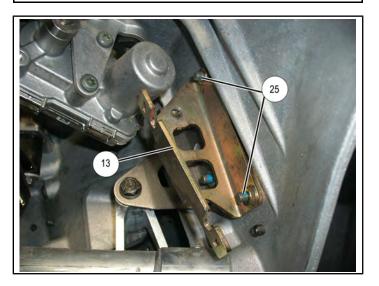
- 7. Apply parking brake to remove drive belt.
- Remove drive clutch per MRM (Master Repair Manual).
- 9. Remove Y-pipe from engine using a 6mm Allen socket and tip out of the way.

- 10. Install pinion and pinion bracket assembly ④ using three screws ④ as shown. Torque to specification.
  - **TORQUE** 22.12 ft. lbs. (30 Nm)



11. Install electric start bracket (1) to right side of the bulkhead using two bolts (2) with T-30 torx® as shown. Torque bolts to below specification.

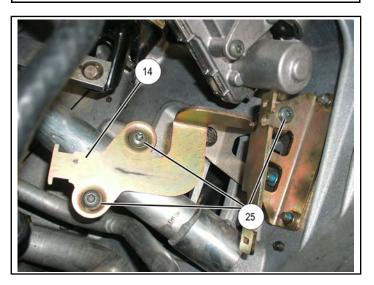
**TORQUE** 7.5 ft. lbs. (10 Nm)



12. Install electric start crosstube bracket (1) and electric start crosstube lower U-bracket (1) to the crosstube using three bolts (2) as shown. Loosely tighten all three bolts using the T-30 torx<sup>®</sup> to align parts as shown. Torque to below specification.

## TORQUE

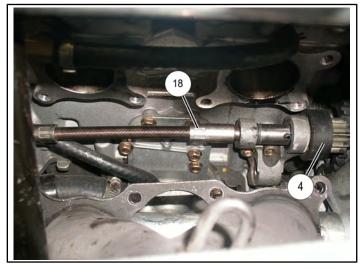
7.5 ft. lbs. (10 Nm)



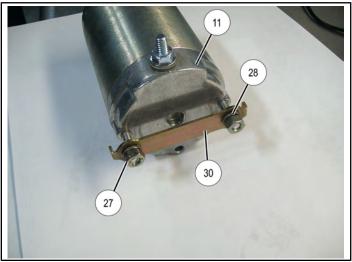
13. Apply foam pad <sup>(26)</sup> to the electric start bracket as shown.



14. Install the flex drive (18) into the starter drive (14) as shown. Reinstall the Y-pipe and replace gasket if necessary (not included in kit).



15. Install plate <sup>(3)</sup> with the tabs facing the starter <sup>(1)</sup> on to the back two bolts followed by lock washers <sup>(3)</sup> and then the nuts <sup>(2)</sup> as shown. Do not tighten at this time.





- 16. Loosely install band clamp <sup>(2)</sup> onto starter motor. Insert flex drive into starter motor end and install starter motor into its brackets as shown.
- 17. Position the band clamp around the starter motor and the tabs on the starter motor bracket, then tighten the forward nut (2) on the back side of the starter as shown. Torque forward nut to below specification.

#### TORQUE

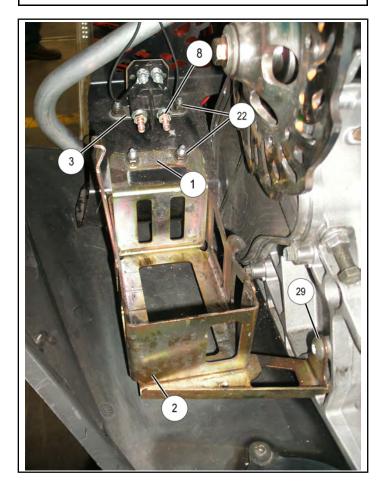
8 ft. lbs. (11 Nm)



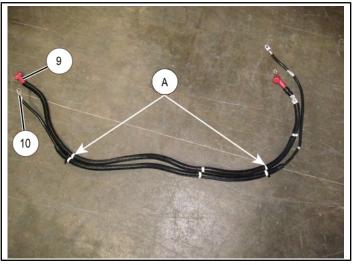
18. Mount the solenoid <sup>®</sup> onto the right footrest using the studplate <sup>③</sup> using two nylon locking nuts <sup>②</sup> . Mount the battery box <sup>②</sup> to the chassis using studplate <sup>①</sup>, two locking nuts <sup>②</sup> and bolt <sup>®</sup> as shown. Torque nylon locking nuts and bolt to specification.

#### TORQUE

Nylon locking nuts 2 : 8 ft. lbs. (11 Nm) Bolt 2 : 30 ft. lbs. (40.6 Nm)



19. Assemble cables (9) and (10) as shown, with both part number tags on the solenoid ends of the cables. Tie the cables together at two locations (A) with cable ties (19).



Route cables behind the caliper, under the recoil housing, and up to the starter terminals as shown. Attach black cable to the loose nut on the back side of the starter and install red cable to starter motor power terminal. Torque nuts to below specification.

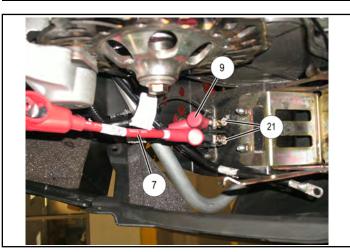
#### TORQUE

8 ft. lbs. (11 Nm)



20. Install red cables ⑦ and ⑨ on to the solenoid with locking nut ⑪ and slide rubber protectors over solenoid nuts. Connect wiring harness ⑥ as shown. Torque the locking nuts ④ to below specification.

### **TORQUE** 8 ft. lb. (11 Nm)

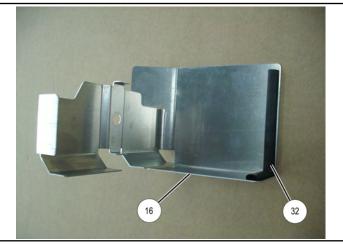




21. Install battery (B) (PN 4012638) and terminals as shown. Slide protective cover over the red terminal.



22. Attach bulb seal (1) to battery heat shield (16) as shown.



23. Install heat shield (6) on battery and secure with rubber strap (7) with D-ring (12) on the end as shown.



24. Install new electric start clutch (5) and torque to specification, refer to Master Repair Manual. Reinstall exhaust pipe, resonator, hood. Reconnect the headlights, reinstall drive belt and side panels.